

## ABSTRACT

A voltage regulator of a vehicle AC generator includes a control circuit connected to a power circuit for supplying field current to a field coil of the AC generator, a power circuit for supplying electric power to the control circuit, a power drive circuit for controlling the power circuit according to a self-excited voltage induced in an armature coil of the AC generator, and a bypass circuit connected to a ground. The resistance of the bypass circuit is reduced when the power circuit does not supply electric power to the control circuit and is increased when the power circuit supplies electric power to the control circuit. Therefore, power consumption of the bypass circuit is reduced when the AC generator starts regular power generation.